

ABSTRACT

Libraries of modified AAV *cap* genes are generated by synthesizing modified *cap* genes using degenerate oligonucleotides. Combinatorial libraries of virions composed of modified (e.g., chimeric), replication-competent AAV vectors and modified Cap proteins are also produced. Helper vectors are described that encode AAV Rep protein, modified Cap proteins, and Ad proteins. The helper vectors are used to produce stocks of virions composed of modified (e.g., chimeric) capsids and rAAV vectors.